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Practices to Prevent Skin Cancer Among New York State Residents, 1989-1996

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Introduction

The American Cancer Society estimates that more than 900,000 new cases of skin cancer occur in the United States each year; the majority of these are highly curable forms of skin cancer. Melanoma is a more serious form of skin cancer which can be fatal. Last year in New York State, approximately 1,200 new cases of cancer and 400 deaths were due to melanoma of the skin. People with light skin, hair or eye color and those who sunburn easily are at greatest risk of malignant melanoma and other forms of skin cancer. Risk of malignant melanoma and other skin cancers can be reduced by lowering exposure to ultraviolet radiation. Individuals can do this by spending less time in the sun, using sunscreen and wearing protective clothing such as a hat while in the sun, and by avoiding artificial sources of ultraviolet radiation such as indoor tanning devices.

Methods

The Behavioral Risk Factor Surveillance System surveyed New York State residents about these sun protective behaviors in 1989, 1993 and 1996. In all survey years, questions were only directed to individuals who reported spending more than one hour in the sun on those summer days in which they spent time in the sun. Time in the sun for any activity, not just tanning, was included. In 1996, sun protective questions were not asked of black survey respon-

dents because black individuals are much less susceptible to the effects of ultraviolet radiation, and because many black respondents in the previous two survey years indicated that these questions were not applicable to them. This report compares sun protective behaviors for the three points in time for those respondents who did not identify themselves as black.

Adult Health

Results

Table 1 presents the weighted percentage of adults reporting regular use of some form of sun protection when in the sun. Regular use was defined as responding "always" or "nearly always" to questions about use of sunscreen, clothes or hat, or a shade device, such as a beach umbrella. An individual was classified as a regular user of sun protection if he or she used any one or more of the above protective items. Suntan lotions that did not screen out ultraviolet radiation were not considered sun protective.

Between 1989 and 1996, the use of regular sun protection increased for all sociodemographic groups. The largest increases in regular use of sun protection occurred among individuals with household incomes under \$35,000 and individuals with a high school education or lower, both groups with lower usage rates in the 1989 survey. By 1996, little difference in sun protection was noted between income groups. Regular use of sun protection was slightly lower



among residents of New York City and among individuals under age 35.

Although the overall use of one or more sun protective items generally increased, the proportion of individuals reporting regular use of sunscreen changed little between 1989 and 1996 (39% in 1989 vs. 44% in 1996). Use of shade while outdoors nearly doubled (13% in 1989 vs. 24% in 1996). Regular use of clothing, including a hat to shade the skin outdoors, also increased (28% in 1989 vs. 43% in 1996). Despite an increase in the proportion of respondents who regularly reported sun protection behaviors, the proportion of respondents who reported ever using a tanning lamp also increased slightly from 7 percent to 8 percent in the first two surveys, to 12 percent in 1996. Few reported using a tanning lamp regularly. The proportion of regular sun protection among tanning lamp users was very close to that of respondents generally (62% among tanning lamp users vs. 67% among respondents overall).

Discussion and Recommendations

Regular use of sunscreen is one important means for reducing exposure to ultraviolet radiation. Other means include making use of shade pavilions or beach umbrellas and wearing a hat or other clothing that keeps the skin out of the sun. By 1996, two-thirds of at-risk respondents engaged in one or more of these sun protective behaviors. Regular use of sun protection was slightly lower among residents of New York City, despite the fact that there were no regional differences in the amount of reported time spent in the sun.

Those who reported use of a tanning lamp reported using sun protection when outdoors as regularly as other respondents. This may suggest that individuals who use tanning lamps may not be aware of the risk of this form of ultraviolet radiation exposure because burning does not usually occur, or choose to accept the risk for the sake of tanning. Sun safety efforts should include information on exposure to artificial forms of ultraviolet radiation.

A growing number of respondents reported use of shade in reducing risk. This may reflect increasing availability of shade in outdoor recreational areas such as parks and outdoor pools, or a greater effort to seek out opportunities to stay shaded while outdoors. Outdoor recreational areas, especially areas used by children such as school or day care playgrounds, should be equipped with adequate shade opportunities.

Table I: BRFSS New York State Weighted Percent of Respondents Reporting Regular Use of Sun Protection* by Selected Sociodemographic Characteristics and Survey Year

	1000	1003	100/
Characteristic	1989	1993 1996 (n=1,097) (n=1,777)	
	(n=525)	. ,	
	%	%	%
Total	56.3	64.6	66.6
Sex			
Male	54.5	60.6	64.6
Female	58.2	69.9	68.4
Region			
New York City	55.2	58.3	61.1
Rest of State	56.7	67.3	68.8
Age			
18-34	56.3	59.3	62.7
35-54	53.9	68.2	68.2
55+	60.7	69.4	68.9
Education			
High School or less	51.2	59.8	66. l
Some college	61.4	66.6	64.7
College	59.8	69.1	69.1
Income			
<\$25,000	54.8	58.8	63.4
\$25-34,999	47.6	64.3	68.4
\$35-\$50,000	64.5	66. l	68.5
\$50,000 and over	60.4	68.3	65.3

^{*} Limited to respondents who are not black and who also reported spending at least one hour in the sun on an average week in the summer.